

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) An isolated, purified, or recombinant nucleic acid comprising a polyketide modifying gene, wherein said gene encodes a polyketide modifying enzyme selected from the group consisting of MegR, MegCIV, MegCV, MegBVI, MegBIII, MegL, and MegM, wherein MegR has the sequence encoded by nucleotides 52-942 of SEQ ID NO:1, MegCIV has the sequence encoded by nucleotides 3893-5098 of SEQ ID NO:1, MegCV has the sequence encoded by nucleotides 2386-3855 of SEQ ID NO:1, MegBVI has the sequence encoded by nucleotides 5095-6558 of SEQ ID NO:1, MegBIII has the sequence encoded by nucleotides 12316-13548 of SEQ ID NO:1, MegL has the sequence encoded by nucleotides 14908-15972 of SEQ ID NO:1, and MegM has the sequence encoded by nucleotides 13928-14911 of SEQ ID NO:1.
2. (Previously Presented) The nucleic acid of Claim 1, wherein said gene encodes a polyketide modifying enzyme selected from the group consisting of MegCV, MegCIV, and MegBVI.
3. (Previously Presented) The nucleic acid of Claim 1, wherein said gene encodes a polyketide modifying enzyme selected from the group consisting of MegBIII, MegM, and MegL.
- 4-15. (Canceled).
16. (Original) An expression vector comprising the nucleic acid of claim 1.
17. (Original) A host cell comprising the nucleic acid of claim 1.
- 18-20: (Canceled).

21. (Currently Amended) A method of producing a modified polyketide, said method comprising culturing a recombinant cell transformed with~~comprising~~ a nucleic acid of claim 1 under conditions in which the cell expresses a product of a gene encoded by the nucleic acid of claim 1, and under conditions in which an[[the]] unmodified polyketide is present, thereby producing the modified polyketide.

22. (Original) The method of claim 21 wherein said cell further comprises a recombinant nucleic acid encoding at least one module of a polyketide synthase.

23. (Canceled).

24. (Previously Presented) The nucleic acid of claim 1 that encodes the MegL protein and/or the Meg M protein.

25. (Currently Amended) An isolated, purified, or recombinant nucleic acid comprising a polyketide modifying gene, wherein said gene encodes a MegL and/or a MegM polyketide modifying enzyme, and wherein said nucleic acid optionally comprises a polyketide modifying gene encoding a polyketide modifying enzyme selected from the group consisting of MegR, MegCIV, MegCV, MegBVI, and MegBIII, wherein MegR has the sequence encoded by nucleotides 52-942 of SEQ ID NO:1, MegCIV has the sequence encoded by nucleotides 3893-5098 of SEQ ID NO:1, MegCV has the sequence encoded by nucleotides 2386-3855 of SEQ ID NO:1, MegBVI has the sequence encoded by nucleotides 5095-6558 of SEQ ID NO:1, MegBIII has the sequence encoded by nucleotides 12316-13548 of SEQ ID NO:1, MegL has the sequence encoded by nucleotides 14908-15972 of SEQ ID NO:1, and MegM has the sequence encoded by nucleotides 13928-14911 of SEQ ID NO:1) and wherein the[[The]] nucleic acid ~~of claim 24 that~~ does not comprise the *S. erythraea* Meg CII gene (nucleotides 6962-8038 of SEQ ID NO:1) and/or does not comprise the *S. erythraea* MegBIII gene (nucleotides 12316-13548 of SEQ ID NO:1).

26. (Currently Amended) The nucleic acid of claim 25[[24]] that does not comprise the *S. erythraea* Meg CII gene (nucleotides 6962-8038 of SEQ ID NO:1).

27. (Currently Amended) The nucleic acid of claim 25[[24]] that does not comprise the *S. erythraea* MegBIII gene (nucleotides 12316-13548 of SEQ ID NO:1).

28. (Currently Amended) An isolated, purified, or recombinant nucleic acid comprising a polyketide modifying gene, wherein said gene encodes a MegBVI polyketide modifying enzyme, and wherein said nucleic acid optionally comprises a polyketide modifying gene encoding a polyketide modifying enzyme selected from the group consisting of MegR, MegCIV, MegCV, MegBIII, MegL, and MegM, wherein MegR has the sequence encoded by nucleotides 52-942 of SEQ ID NO:1, MegCIV has the sequence encoded by nucleotides 3893-5098 of SEQ ID NO:1, MegCV has the sequence encoded by nucleotides 2386-3855 of SEQ ID NO:1, MegBVI has the sequence encoded by nucleotides 5095-6558 of SEQ ID NO:1 MegBIII has the sequence encoded by nucleotides 12316-13548 of SEQ ID NO:1, MegL has the sequence encoded by nucleotides 14908-15972 of SEQ ID NO:1, and MegM has the sequence encoded by nucleotides 13928-14911 of SEQ ID NO:1).

29. (Currently Amended) The nucleic acid of claim 25[[28]] that encodes the MegBVI enzyme.

30. (Previously Presented) An expression vector comprising the nucleic acid of claim 25.

31. (Previously Presented) A host cell comprising the nucleic acid of claim 30.

32. (New) The nucleic acid of Claim 1, which does not comprise a gene encoding MegY or a gene encoding MegCII.